

FACT SHEET

February 20, 2009

Applicant: Honorable Richard Champagne, Mayor
Town of Lockport
710 Church Street
Lockport, Louisiana 70374

AI Number: AI 19435
Permit No.: LASS019435
TEMPO ID#: PER20080001

Application Type: Sewage Sludge & Biosolids Use or Disposal Permit Application
Lafourche Parish

Permit Action:

Draft Sewage Sludge & Biosolids Use or Disposal Permit

Sewage Sludge Preparation Process:

The Preparation Process utilizes Air Drying/Drying Beds. The Preparation Process is located at 710 Church Street, Lockport, Louisiana - Lafourche Parish.

Sewage Sludge & Biosolids Use or Disposal Option:

Land Application of a Class B Biosolids.

The land application site is the Bollinger & Boyd Farms located on Hwy. 308, Lockport, Lafourche Parish, Louisiana.

The geographic coordinates of the land application site are:

Latitude 29° 36' 22"

Longitude 90° 29' 12"

Section 25 & 72, Township 17 South, Range 19 East

Pertinent Information:

January 8, 2001: The town of Lockport was issued the Solid Waste Beneficial Use Permit, P-0343. Therefore, the town of Lockport's sewage sludge operation is presently regulated under this permit.

October 21, 2008: The Water Permits Division received a permit application for the Use or Disposal of Sewage Sludge & Biosolids from GSE Associates, Inc. on behalf of the town of Lockport.

November 03, 2008: A technical review of the permit application received on **October 21, 2008** was completed and it was determined that additional information was needed in order to draft a permit package.

The following additional information was deemed necessary prior to the drafting of a permit package:

1. **General:** LAC 33:IX.7301.D.1.a.ii requires the administrative authority to reissue a Louisiana Sewage Sludge and Biosolids Use or Disposal Permit to replace the Standard Solid Waste Beneficial Use Permit, P-0343 that was issued to the town of Lockport on January 8, 2001. Therefore, the town of Lockport must submit a letter requesting the termination of the Standard Solid Waste Beneficial Use Permit, P-0343 upon issuance of a Sewage Sludge and Biosolids Use or Disposal Permit.
2. **General Information Section – b:** In addition to the “Town of Lockport”, a person’s name must be provided (i.e. Mayor, Parish President, Superintendent, etc.)
3. **General Information Section – d:** The only box that is needed as being checked “√” is the box for “Publicly Owned Treatment Works.”
4. **Specific Facility Information Section - e:** If the response to “d” of this section is “0”; then, the response to “e” should be “N/A”.
5. **Specific Facility Information Section - l:** If the town of Lockport can only meet the levels of Tables 1 & 4 for pollutants, a “Cumulative Pollutant Loading Rate” calculation must be provided with the permit application. The permit requirements will then be based upon the calculated “Cumulative Pollutant Loading Rate”. However, according to the laboratory results presented in **Appendix Specific Facility Info – Pollutants**, the sewage sludge is meeting the levels at Tables 1 & 3. Please clarify.
6. **Specific Facility Information Section – n:** The town of Lockport cannot utilize simply “Drying Beds” as a form of Alternative 2 sewage sludge treatment unless the Town can provide documentation that the sewage sludge is remaining on the drying bed, as a batch process, for at least three (3) months and that the temperature is > 32° F during two (2) of the three (3) before the resultant Class B Biosolids can be land applied. Please provide this information as part of the permit application.
7. **Appendix Specific Facility Info – Air Drying/Drying Beds:** Please see the comment in Number 6 above regarding the required time and temperature for placement of sewage sludge on drying beds to achieve the requirements of Alternative 2.

Additionally, the wording provided in this Appendix indicates that storage of the Class B Biosolids in the storage tanks may exceed six (6) months if the farmer is not ready to fertilize his fields. According to LAC 33:IX.7301.G.3.b, if the town of Lockport requires storage of its Class B Biosolids for a period of > six (6) months, the Town must obtain approval from the administrative authority by following the requirements set forth at LAC 33:IX.7301.G.3.c & .d. Therefore, please address how the town of Lockport will follow the requirements at LAC 33:IX.7301.G.3.c & .d if storage of its Class B Biosolids must extend a six (6) month period.

8. **Appendix Specific Facility Info – Other Requirements:** Sewage sludge have been documented to produce odors no matter what treatment process that the sewage sludge is subjected to. Therefore, how odors, if they do develop, will be handled must be addressed in the permit application
9. **Appendix Specific Facility Info – POTW Operations & Procedures:** The O&P Manual must include a section or sections on the procedures that will be followed during the land application of the Class B Biosolids; including employee safety.

The Department of Environmental Quality LPDES contact information in Subchapter 5.3.E of the O&P Manual needs to be updated.

The permit conditions provided in Subchapter 5.4 is for the LPDES permit and not for and does not reflect sewage sludge permit requirements. Additionally, a LPDES permit was issued to the town of Lockport on October 28, 2008 with slightly different limits. Therefore, the LPDES permit requirements in the O&P Manual also needs to be updated.

The Discharge Monitoring Report Sheet (Figure 5.8) in the O&P Manual is only to be utilized for reporting LPDES permit laboratory results to DEQ and Sewage Sludge results to EPA Region VI. If a Sewage Sludge & Biosolids Use or Disposal Permit would be issued to the town of Lockport, the proper DEQ Sewage Sludge & Biosolids reporting form would be provided by the Louisiana Department of Environmental Quality or obtained off of the LDEQ Sewage Sludge/Biosolids Internet Site at →

<http://www.deq.louisiana.gov/portal/tabid/2296/Default.aspx>

10. **Disposal or Land Application Section – Question (2):** If the land owner does not take the sewage sludge from the town of Lockport and further “treats” or “alters” the sewage sludge; then, the response to Question (2) is “No”.
11. **Sold To Or Given Away Or Pumped Out Section:** See the comment to Number 10 above. If the response to **Disposal or Land Application Section – Question (2)** is “No”; then, there should not be any responses to this section.
12. **Appendix Sold To Or Given Away Or Pumped Out – Required Information to Another User:** See the comments to Numbers 10 & 11 above. If the response to **Disposal or Land Application Section – Question (2)** is “No”; then, there is no need for this Appendix.
13. **Land Application Section – e:** If the response to **Specific Facility Information Section – I** is Tables 1 & 4; then, the box labeled “Pollutants” should also be checked.

14. **Appendix Land Application – Nutrient Management Plan:** The Nutrient Management Plan presented in the permit application does not take in other types of fertilizers such as commercial fertilizer or manures. If these types of fertilizers are not being utilized, the Nutrient Management Plan needs to address the fertilizers as not being utilized and enter the use as “0” pounds or tons used.

For LDEQ purposes, all citations/references to the EPA 40 CFR 503 regulations in the Certification Statements need to be changed to reflect LDEQ's *Standards for the Use or Disposal of Sewage Sludge and Biosolids* regulations. Additionally, if a Sewage Sludge & Biosolids Use or Disposal Permit should be issued to the town of Lockport, the permit will contain the “proper” Certification Statements. Therefore, the wording of the Certification Statements provided in the permit application may have to be revised to reflect the wording required in the permit.

15. **Appendix Land Application – Agronomic Rate:** Please clarify as to why the Agronomic Rate is based upon the Phosphorus (P) content rather than on nitrogen (N) content.

Additionally, if the Class B Biosolids is only capable of meeting Tables 1 & 4 for Pollutants, a Cumulative Pollutant Loading Rate calculation must be provided as part of the permit application.

16. **Appendix Land Application – Corps of Engineer:** The response from the Corps of Engineers needs to be provided as part of the permit application.
17. **Appendix Land Application – Wildlife & Fisheries:** The response from the Louisiana Department of Wildlife & Fisheries and/or the U.S. Department of Fish & Wildlife needs to be provided as part of the permit application.
18. **Appendix Land Application – CRT:** The response from the Louisiana Department of Culture, Recreation, and Tourism needs to be provided as part of the permit application.
19. **LAC 33.I.1701 Requirements Section – a:** The number **P-0343** is the Solid Waste Permit Number and not the Sewage Sludge Use or Disposal Permit Number. A Sewage Sludge & Biosolids Use or Disposal Permit has not yet been issued to the town of Lockport. Therefore, please make the necessary correction.
20. **Certification and Signature Section:** The signature of the person or persons who completed the permit application is missing. Additionally, the Professional License Number or the “Official” P.E. Seal is missing. Please provide the missing signature and License Number or Official Seal.

November 14, 2008: A letter was drafted and routed for review requesting that the additional information listed in numbers 1-20 above be submitted to the Department on or before thirty (30) days after receipt of the letter.

November 18, 2008: The Additional Information package was routed for review and signature.

November 19, 2008: The Additional Information Request Letter was mailed out to the town of Lockport.

January 29, 2009: The Water Permits Division received a Response from GSE Associates, Inc. on behalf of the town of Lockport to the November 19, 2008 Additional Information Request. The Response was missing the Letter from the Corps of Engineers.

February 16, 2009: An electronic copy of the letter was emailed to Mr. J. Kilren Vidrine by GSE Associates, Inc. on behalf of the town of Lockport.

February 19, 2009: The response was found to be complete. Therefore, work on a Draft Sewage Sludge & Biosolids Use or Disposal Permit Package for the town of Lockport for the Land Application of a Class B Biosolids was begun.

February 23, 2009: The Draft Sewage Sludge & Biosolids Use or Disposal Permit was completed having the following requirements:

Pollutants

a. Class B Biosolids shall not be applied to the town of Lockport Beneficial Use Class B Biosolids Land Application site if the concentration of any pollutant in the Class B Biosolids exceeds the ceiling concentration indicated for the pollutants listed in Table 1 below:

Table 1 Ceiling Concentrations	
Pollutant	Ceiling Concentration (milligrams per kilogram)¹
Arsenic	75
Cadmium	85
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
Selenium	100
Zinc	7500
¹ Dry weight basis	

b. The concentration for each pollutant in the Class B Biosolids shall not exceed the concentration for the pollutants in Table 2 below prior to land application at the town of Lockport Beneficial Use Class B Biosolids Land Application site:

Table 2	
Pollutant Concentrations	
Pollutant	Monthly Average Concentration (milligrams per kilogram) ¹
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2800
¹ Dry weight basis	

Pathogens

Pathogen reduction requirements shall be achieved through the Class B Alternative indicated in Table 3 below:

TABLE 3	
PATHOGEN REDUCTION	
NAME OF FACILITY	CLASS B ALTERNATIVE
Town of Lockport Wastewater Treatment Facility	<p>Alternative 1 - As allowed by LAC 33:IX.7309.C.2.b</p> <p>Seven (7) representative samples of the Class B Biosolids shall be collected. The geometric mean of the density of fecal coliform in the samples required to be collected shall be less than either 2,000,000 Most Probable Number (MPN) per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units (CFU) per gram of total solids (dry weight basis).</p>

Vector Attraction Reduction

Vector Attraction Reduction requirements shall be achieved through the Procedure indicated in Table 4 below:

TABLE 4	
VECTOR ATTRACTION REDUCTION	
NAME OF FACILITY	PROCEDURE
Town of Lockport Wastewater Treatment Facility	Incorporation of Biosolids – As allowed by LAC 33:IX.7309.D.2.g.i Biosolids applied to the land surface shall be incorporated into the soil within six (6) hours after application to the land, unless otherwise specified by the permitting authority.

General and Other Management Practices

- a. The Class B Biosolids applied at the town of Lockport Beneficial Use Class B Biosolids Land Application site shall only be applied at a whole Biosolids application rate that is equal to or less than the Agronomic Rate.
- b. The Class B Biosolids shall be applied to the land in accordance with the slope requirements in Table 5 below at the town of Lockport Beneficial Use Class B Biosolids Land Application site:

Table 5	
Slope Limitations for Land Application of Class B Biosolids	
Slope Percent	Slope Limitations
0-3	None, except drainage to prevent standing water shall be provided.

- c. Class B Biosolids having a concentration of PCBs equal to or greater than 10 mg/kg of total solids (dry wt.) must be incorporated into the soil regardless of slope.
- d. Class B Biosolids shall only be applied at a distance that is greater than 300 feet from a Private Potable Water Supply at any of the town of Lockport Beneficial Use Class B Biosolids Land Application site.
- e. Class B Biosolids shall only be applied at a distance that is greater than 300 feet from a Public Potable Water Supply (Includes a ground water well, surface water intake, treatment plant, elevated storage, and ground storage tank.) at any of the town of Lockport Beneficial Use Class B Biosolids Land Application site.
- f. Class B Biosolids shall only be applied at a distance that is greater than 100 feet from a property boundary at any of the town of Lockport Beneficial Use Class B Biosolids Land Application site.

g. Class B Biosolids shall be applied at a distance that is greater than 200 feet from an established institution at the town of Lockport Beneficial Use Class B Biosolids Land Application site that was permitted under the Solid Waste Beneficial Use Biosolids Permit that was issued on January 8, 2001. For all new or future town of Lockport Beneficial Use Class B Biosolids Land Application sites, the Class B Biosolids shall be applied at a distance that is greater than 1,000 feet from an established institution.

h. Class B Biosolids shall be applied at a distance that is greater than 200 feet from an occupied residential home or structure at the town of Lockport Beneficial Use Class B Biosolids Land Application site that was permitted under the Solid Waste Beneficial Use Biosolids Permit that was issued on January 8, 2001. For all new or future town of Lockport Beneficial Use Class B Biosolids Land Application sites, the Class B Biosolids shall be applied at a distance that is greater than 500 feet from an occupied residential home or structure.

i. The soil type at the Class B Biosolids Land Application is Commerce Silt Loam. The Commerce Silt Loam has a seasonal high water table that fluctuates between a depth of 1.5 and 4 feet below the soil surface during the months of December through April. Therefore, Class B Biosolids shall not be applied to the town of Lockport Beneficial Use Class B Biosolids Land Application site during the months of December through April when the water table is less than or at two feet below the soil surface or some form of monitoring device shall be provided to ensure that the annual high water table is greater than two feet below the soil surface during a land application event.

j. The following must be reviewed and, if necessary, reestablished or recalculated on an annual basis; or, if double cropping is practiced, prior to each crop being planted:

- Agronomic Rate determination
- Spreading/Application rate determination

k. Class B Biosolids shall not be applied to the town of Lockport Beneficial Use Class B Biosolids Land Application site if the Class B Biosolids is likely to adversely affect a threatened or endangered species listed under Section 4 of the Endangered Species Act or its designated critical habitat.

l. Class B Biosolids shall not be applied to any of the town of Lockport Beneficial Use Class B Biosolids Land Application site if the site is flooded, frozen, or snow-covered so that the Class B Biosolids enters a *wetland* or other *waters of the state*, except as provided in a permit issued in accordance with Section 402 or 404 of the CWA.

m. Class B Biosolids shall not be applied 33 feet (10 meters) or less from any *waters of the state* at any of the town of Lockport Beneficial Use Class B Biosolids Land Application site, unless otherwise specified by the permitting authority.

n. Class B Biosolids shall not be applied to any of the town of Lockport Beneficial Use Class B Biosolids Land Application site if the Class B Biosolids would affect a property that either is listed on, or is eligible for listing on, the National Historic Register.

Site Restrictions

- a. Food crops with harvested parts that touch the Class B Biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of Biosolids.
- b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of Class B Biosolids when the Class B Biosolids remains on the land surface for four months or longer prior to incorporation into the soil.
- c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of Class B Biosolids when the Class B Biosolids remains on the land surface for less than four months prior to incorporation into the soil.
- d. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of Biosolids.
- e. Turf grown on land where Class B Biosolids are applied shall not be harvested for one year after application of the Class B Biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the permitting authority.
- f. Animals shall not be grazed on the land for 30 days after application of Class B Biosolids.
- g. Public access to land with a high potential for public exposure shall be restricted for one year after application of Class B Biosolids.
- h. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of Class B Biosolids.
- i. Signs shall be posted at all entrances to the town of Lockport Beneficial Use Class B Biosolids Land Application Site having at the minimum the following information:
 - Name of Land Application Site or Facility
 - Wording that indicates that the area is a Biosolids Land Application Site
 - Emergency contact telephone numbers.

Sampling & Analysis

- a. The permittee shall sample and analyze representative samples of the untreated sewage sludge and of any material, except Agricultural Grade Lime, that is to be added, blended, or mixed with the sewage sludge during the preparation of the Class B Biosolids at the town of Lockport's generation/preparation/treatment facility for the parameters listed and at the frequency indicated in Table 6 below:

Table 6	
Raw Sewage Sludge and Materials ^{1/} Added, Blended, or Mixed with the Sewage Sludge (Hazardous Characteristics Testing)	
Parameter	Sampling Frequency
<u>TCLP</u> Metals (As, Ba, Cd, Cr, Pb, Se, Ag) Hg Volatile Organics Semi-Volatile Organics Pesticides Herbicides	Once/Year
PCB (Total)	Once/Year

^{1/}Any material, except Agricultural Grade Lime, that is to be added, blended, or mixed with the sewage sludge must be sampled and tested prior to adding, blending, or mixing with the sewage sludge.

b. The permittee shall sample and analyze representative samples of the Class B Biosolids prepared by the town of Lockport's generator/preparation/treatment facility for the parameters listed in and at the frequency indicated in Table 7 below prior to the land application of the Class B Biosolids:

Table 7		
Class-B Biosolids (Pollutants/Pathogen/Vector Attraction Reduction Testing)		
Outfall Number	Parameter(s)	Sampling Frequency
201	1. Pathogens 2. Arsenic 3. Cadmium 4. Copper 5. Lead 6. Mercury 7. Molybdenum 8. Nickel 9. Selenium 10. Zinc 11. Volatile Solids Reduction 12. Total Solids	Once/Year

c. The permittee shall sample and analysis the soils at each of the Town of Lockport Beneficial Use Land Application site for the parameters listed in Table 8:

TABLE 8	
SOIL SAMPLING REQUIREMENTS	
PARAMETERS TO SAMPLE	SAMPLING FREQUENCY
1. Total Kjeldahl nitrogen 2. Total nitrates 3. Total nitrites 4. Total phosphorus 5. Total potassium 6. pH	Once/Year Or If double cropping is practiced, prior to the planting of each crop.

All samples and measurements taken for the purpose of laboratory analysis shall be representative of the monitored activity and shall be in accordance with the methods referenced in LAC 33:IX.7301.I.

Recordkeeping

- a. The laboratory results for the parameters in Tables 6, 7 and 8 shall be retained for the life of the permit.
- b. The following information must be recorded for each land application event and the information retained indefinitely:
 - The location, by physical address and latitude and longitude, of each site on which the bulk Class B Biosolids is applied.
 - The number of acres (or hectares) in each site on which the bulk Class B Biosolids is applied.
 - The date and time the bulk Class B Biosolids is applied to the land surface.
 - The amount of bulk Class B Biosolids that is applied at each site on each day of application.
 - The date and time the bulk Class B Biosolids is incorporated into the soil.
- c. The permittee shall create and maintain records of monitoring and sampling and analysis information that shall include:
 - the date, exact place, and time of sampling or measurements;
 - the individual(s) who performed the sampling or measurements;
 - the date(s) analyses were performed;
 - the individual(s) who performed the analysis;
 - the analytical techniques or methods used; and,
 - the results of such analysis.

Reporting

- a. The permittee shall submit reports to the Administrative Authority the forms specified by the Administrative Authority as indicated below:

- i. The annual amount of sewage sludge generated at the facility shall be reported on February 28th of each year.
- ii. The annual amount of sewage sludge that is prepared into a Class B Biosolids shall be reported on February 28th of each year.
- iii. The annual amount of Class B Biosolids that is land applied shall be reported on February 28th of each year.
- iv. For the parameters listed in Tables 6, 7 and 8, the reporting due date is as indicated in Table 9 below:

Table 9	
Reporting—Land Application	
Monitoring Period (Once per Year)	Report Due Date
January - December	February 28

Storage of Sewage Sludge

1. The storage of sewage sludge shall not exceed a period of six consecutive months unless notification is submitted to the administrative authority in the form of a demonstration that includes, but is not limited to, the following information:

- the name and address of the person who prepared the sewage sludge into the Class B Biosolids;
- the name and address of the person who either owns or leases the land where the sewage sludge or Class B Biosolids are to be stored, if different from the person who prepared the sewage sludge;
- the location, by either street address or latitude and longitude, of the land where the sewage sludge or Class B Biosolids are to be stored;
- an explanation of why the sewage sludge or Class B Biosolids needs to remain on the land;
- an explanation of why human health and the environment will not be affected;
- the approximate date and length of time the sewage sludge or Class B Biosolids will be stored on the land; and
- the final use and disposal method after the storage period has expired.

2. The request for an extension for storage for greater than six months must be submitted in writing to the Office of Environmental Services at least 60 days prior to the expiration of the first six-month storage period.

3. The storage period shall not extend for greater than six months until the administrative authority has made and issued a determination to grant or deny the request for the storage of sewage sludge beyond the original six month storage period.

Procedure for the Addition or Removal of Land Application Sites

1. To add a land application site or sites to the permit, a request package containing the information that follows shall be submitted to the administrative authority:

- evidence of notification of the landowners bordering the proposed land application site or sites. The notification shall be in the form of a public notice placed in the local newspaper being circulated in the area of the proposed site or sites, certified letters of notification that were either hand delivered or mailed to the landowners bordering the proposed site or sites, or signed agreements of the landowners bordering the proposed site or sites to application of Biosolids to the site or sites;
- signed agreement(s) to the land application of Biosolids from the landowner(s) of the proposed site or sites; and,
- a completed Sewage Sludge and Biosolids Use or Disposal Permit application form.

2. To remove a land application site or sites from the permit, the person shall submit a request package to the administrative authority at least 90 days prior to the removal of the site or sites containing the following information:

- aerial photographs showing the location of the land application site or sites that are being proposed to be removed;
- certification that all Biosolids that were stored at the site or sites have either been land applied in accordance with the permit requirements or totally removed and used at another site in accordance with the permit requirements or removed and disposed at a permitted landfill; and,
- signed agreements from the landowner(s) of the site or sites for the site or sites to be removed from the land application of Biosolids.

3. After receipt and review of the request package for the addition of a land application site or sites or the request package for the removal of a land application site or sites, a decision shall be rendered by the administrative authority regarding the request.

Certification Requirements

1. Either (a) the permittee who was employed at the facility described in Part I of this permit on or after November 20, 2007 or (b) at least one of the employees who became employed at the facility describe in Part I of this permit on or after November 20, 2007 and are under the supervision of the permittee shall obtain, at a minimum, a Class III Wastewater Treatment Operator Certification.

2. If the permittee or the employees under the supervision of the permittee of the facility described in Part I of the permit (a) does not presently possess the minimum Wastewater Treatment Operator Certification indicated above and (b) was employed before November 20, 2007, the requirement in Number J.1 above does not apply.

3. If the Louisiana Department of Health & Hospitals (LDHH) requires a class level for Wastewater Treatment Operator Certification higher than the class level indicated in J.1 above, the class level indicated in J.1 above shall be superseded by the LDHH requirement and the permittee shall abide by the LDHH requirement.

4. To maintain certification, a minimum of 16 contact hours of continuous education are required for each certificate held during the previous two-year certification period. Classes, seminars, conferences, or conventions used for units shall be approved by the administrative authority.

February 25, 2009: The Draft Permit Package was routed for review and approval.

Prepared By: J. Kilren Vidrine, ES-Staff (DCL-A)
 Water Permits Division
 Biosolids